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REMARKS

In response to the Final Office Action mailed July 1, 2003, the Applicant respectfully requests reconsideration.

As shown above under the heading *Listing of the Claims*, claims 1- 43 have been examined and are currently pending for examination, of which claims 1, 11, 12 and 13 are independent.

1. Claims 1-10 and 14-17 Patentably Distinguish Over Zacharia

Claims 1-10 and 14-17 stand rejected (Office Action, ¶5) under 35 U.S.C. §102(a) as purportedly being anticipated by "Collaborative Reputation Mechanisms in Electronic Marketplaces" by Giorgos C. Zacharia ("Zacharia"). Applicants respectfully traverse this rejection for at least the following reasons.

1.1 Discussion of Zacharia

The discussion of Zacharia set forth in Applicant's previous response dated April 2, 2003 is hereby incorporated by reference into this response to avoid unnecessary repetitiveness.

Section 5 of the Office Action states:

"[T]he Zacharia reference does teach the reputation of a user as being based on a qualitative rating. . . Zacharia states that reputation ratings can vary from 0.1 for terrible to 1 for perfect. This inherently means that the first rater reputation, does, in fact, represent a reputation of the second entity as a *qualitative rater of other entities*. The qualitative rating corresponds to a quantitative value that is used in the algorithmic calculations used to determine the ratee reputation in equation 1. Therefore, since Zacharia does teach the use of qualitative ratings to produce a ratee reputation, Examiner upholds prior rejections to claim 1 . . ."

Applicant agrees that Zacharia teaches using qualitative ratings (e.g., the reputation ratings ranging from 0.1 to 1) to produce a ratee reputation and that the qualitative rating is used to determine the ratee reputation in equation 1. However, Applicant respectfully disagrees with the conclusion that Zacharia's teaching of reputation ratings means that the first rater reputation represents a reputation of the second entity as a qualitative rater of other entities. No support for this conclusion is found in Zacharia or in the Office Action. Thus, there apparently is confusion regarding the term "rater reputation." Zacharia teaches that ratings are used to determine a ratee reputation (the only type of reputation disclosed in Zacharia), but is silent regarding rater reputations. The following passage from Applicant's specification as filed describes Sporas, the 754992-1

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reputation mechanism described in Zacharia, and crystallizes the distinction between a ratee reputation and a rater reputation:

"The Sporas reputation mechanism described in the Zacharia thesis uses a single reputation value to represent the reputation of an entity both as a ratee and a rater. This single reputation represents the reputation of an entity as a combination of ratings provided by other entities, but does not provide an indication of the reputation or trustworthiness of an entity as a rater of other entities. Thus, an entity may receive high ratings from other entities and thus have a high single-valued reputation, although the entity is a poor rater of other entities and thus should not truly have a high reputation as a rater of other entities. As used herein, a "rater reputation" of an entity is a reputation or trustworthiness of the entity as a rater of one or more other entities, and a "ratee reputation" of an entity is the reputation of the entity according to the ratings of the entity provided by one or more other entities.

Therefore, Sporas does not provide a method or system for determining and maintaining a rater reputation of an entity." (Page 7, lines 4-16)

Thus, the reputation described in Zacharia is a ratee reputation, i.e., the reputation of an entity as a combination of ratings provided by other entities, which does not provide an indication of the reputation or trustworthiness of an entity as a rater of other entities.

To address the above-described limitation of Sporas, Applicant teaches "[A] method and system for determining a ratee reputation of an entity based at least in part on the rater reputations of one or more of the entities that have rated the rated entity." (Page 7, lines 20-23).

1.2 Example

The following example may provide a better understanding of a rater reputation. It should be appreciated, however, that the following example is merely illustrative and is not intended to limit the scope of the claims in any way, but to facilitate a better understanding of Applicant's contribution to the art.

Consider an on-line marketplace (e.g., eBay) where several entities (i.e., users), including businesses and individuals, sell products to one another on-line. In such a marketplace, entities may rate (i.e. provide ratings for) one another based on the sale of their products. Thus, for any given transaction, an entity can be a seller or a buyer. When acting as a buyer, the entity rates the seller based on the sale of the product. As will become more clear below, in this example, the ratee reputation of an entity is indicative of an entity's reputation as a *seller*, whereas, the rater reputation is related to the entity's ability as a *buyer*. Thus, for the remainder of the

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description of this example, for clarity, the ratee reputation of an entity will be referred to as a seller reputation, and the rater reputation will be referred to as a buyer reputation.

Table 1 below illustrates an example of members (i.e., entities) of an on-line community, the ratings they provided for one another, and the resulting seller reputations. The name of each entity, acting as a buyer, appears in the first column of the table. Each subsequent column corresponds to a different entity acting as a seller. For each row listing a buyer, the numbers in each column of the row represent the rating provided by the buyer for the seller listed in the column. For example, as illustrated by the first row of the Table 1, Acme, Inc. provided a rating of 6 for a sale of a product by Jane, a 9 for John, a 7 for Mary and a 7 for Widgets, Inc..

Rater (i.e. Buyer)	Ratee (i.e. Seller)				
	Acme, Inc.	Jane	John	Mary	Widgets, Inc.
Acme, Inc.	NA	6	9	7	7
Jane	8	NA	9	8	8
John	10	9	NA	10	10
Mary	7	6	9	NA	8
Widgets, Inc.	8	7	8	8	NA
Seller Reputation	8.3	7.3	8.3	8.3	8.3

Table 1. Seller Reputations

The seller reputation of each entity is a combination of the ratings provided for the entity acting as a seller by the other entities acting as buyers. Specifically, as shown in the last row of Table 1, the seller reputation appearing in each column is the average of the ratings provided for the seller listed in the column. For example, Mary has a seller reputation = $(7+8 + 10+8)/4 = 8.3$.

Table 2 below lists the buyer reputations of the buyers based on the ratings and seller reputations shown in Table 1. The buyer reputation of an entity is an indication of the trustworthiness of the entity, acting as a buyer, in rating sellers. The buyer reputation may be determined using any suitable technique, for example, as described in the specification of this application. Although an entity may have a good seller reputation, the same entity may have a

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bad buyer reputation. Conversely, an entity may have a bad seller reputation, but a good buyer reputation.

Buyer	Rating
Aome, Inc	7.0
Jane	9.5
John	5.0
Mary	7.8
Widget, inc.	8.1

Table 2. Buyer Reputations

For example, as shown in Table 1, John receives consistently high ratings as a seller (9, 9, 9 and 8), resulting in a high seller reputation of 8.8. However, John as a buyer always provides high ratings of sellers, and these high ratings are inconsistent with the ratings provided by other buyers. More specifically, there is a relatively large difference between each rating John provides for a seller (10, 9, 10 and 10) and the seller reputation of the seller (8.3, 7.3, 8.3 and 8.3, respectively). As a result, John has the lowest buyer reputation among the entities, at 5.0. In contrast, Jane has a lowest seller reputation among the entities, at 7.3, but has the highest buyer reputation, 9.5. Jane has a high buyer reputation because each of her ratings of a seller (8, 9, 8 and 8) is consistently close to the seller reputation for the seller (8.3, 8.8, 8.3 and 8.3, respectively).

Now suppose that a new entity, Smith Corp., enters the on-line marketplace, sells a product to John and sells a product to Jane. John provides a rating of 9 for the sale of the product and Jane provides a rating of 5.

If the buyer reputations of Jane and John are not considered, like in Table 1, when determining the seller reputation, then the seller reputation of Smith Corp. is determined as the average of John's rating and Jane's rating, i.e., $(5+9)/2 = 7$. It should be appreciated that this resulting seller reputation does not take into account the trustworthiness of Jane or John as a rater.

The Sporas technique as taught by Zacharia teaches that the ratings provided by each entity are weighted based on the rater reputation (R^{other}) of the rater. Applying this to the

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example, the seller reputation of the Smith Corp. could be determined as $(8.8*9+7.3*5)/(8.8+7.3) = 7.2$. It should be appreciated that this resulting seller reputation gives more weight to John's rating than to Jane's rating, even though Jane clearly is more trustworthy than John as a rater.

If the seller reputation of Smith Corp. is determined by weighting the ratings provided by John and Jane with their respective buyer (i.e., rater) reputations, then the seller (i.e., ratee) reputation of Smith Corp. = $(5.0*9)+(9.5*5)/(5.0+9.5) = 6.4$. This resulting seller reputation gives more weight to Jane's rating than to John's rating, in harmony with the relative trustworthiness of Jane and John as raters. Thus, weighting ratings based on rater reputations provides a more reliable ratee reputation than a ratee reputation determined by taking the raw average of the ratings or by weighting the average based on seller reputations.

Therefore, by combining a rating provided for a first entity (e.g., a seller) by a second entity (e.g., a buyer) with the rater reputation of the second entity, a more reliable ratee reputation of the first entity can be determined.

1.3 Claim 1 is Not Anticipated By Zacharia

Claim 1 recites:

- "1. A method of ascribing a ratee reputation to a first entity, comprising computer-implemented acts of:
- (A) receiving a first rating of the first entity by a second entity;
 - (B) accessing a first rater reputation representing a reputation of the second entity as a qualitative rater of other entities; and
 - (C) generating a ratee reputation of the first entity, comprising
- (1) combining the first rater reputation and the first rating."

Claim 1 patentably distinguishes over Zacharia because Zacharia simply does not disclose (1) accessing a first rater reputation representing a reputation of the second entity as a qualitative rater of other entities and (2) combining the first rater reputation with a first rating. It should be appreciated that in claim 1, each of the ratee reputation, the first rater reputation and the first rating is a distinct element. Although Zacharia discloses the use of reputation ratings to determine *ratee* reputations, Zacharia simply does not disclose *rater* reputations at all.

Therefore, for at least these reasons, claim 1 is not anticipated by Zacharia under §102(b). Accordingly, Applicant respectfully requests that the rejection of claim 1 under §102(b) as being anticipated by Zacharia be withdrawn.

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Claims 2-10 and 14-17, which each depend directly or indirectly from claim 1, patentably distinguish over the art of record for at least the same reasons as claim 1. Accordingly, Applicant respectfully requests that the rejections of these claims under §102(b) be withdrawn.

2. Claims 11 and 18-30 Patentably Distinguish over Zacharia

Claim 11 stands rejected under 35 U.S.C. 102(b) as purportedly being anticipated by Zacharia. Applicant respectfully traverses this rejection because Zacharia does not disclose a system for ascribing a ratee reputation to a first entity, the system comprising a ratee reputation generator to receive as input a first rating of the first entity by a second entity, to access a first rater reputation representing a reputation of the second entity as a qualitative rater of other entities, to generate a ratee reputation of the first entity by combining the first rater reputation and the first rating, and to provide as output the generated ratee reputation, as recited in claim 11.

Therefore, for at least these reasons, claim 11 is not anticipated by Zacharia under §102(b). Accordingly, Applicant respectfully requests that the rejection of claim 11 under §102(b) as being anticipated by Zacharia be withdrawn. Claims 18-30, which each depend directly or indirectly from claim 11, patentably distinguish over the art of record for at least the same reasons as claim 11. Accordingly, Applicant respectfully requests that the rejections of these claims under §102(a) be withdrawn.

3. Claim 12 Patentably Distinguishes Over Zacharia

Claim 12 stands rejected under 35 U.S.C. 102(b) as purportedly being anticipated by Zacharia. Applicant respectfully traverses this rejection because Zacharia fails to disclose a system for ascribing a ratee reputation to a first entity, the system comprising: means for receiving a first rating of the first entity by a second entity; means for accessing a first rater reputation representing a reputation of the second entity as a qualitative rater of other entities; and means for generating a ratee reputation of the first entity by combining the first rater reputation and the first rating, as recited in claim 12.

Therefore, for at least these reasons, claim 12 is not anticipated by Zacharia under §102(b). Accordingly, Applicant respectfully requests that the rejection of claim 12 under §102(b) as being anticipated by Zacharia be withdrawn.

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4. Claim 13 and 31-43 Patentably Distinguish Over Zacharia

Claim 13 stands rejected under 35 U.S.C. 102(b) as purportedly being anticipated by Zacharia. Applicant respectfully traverses this rejection because Zacharia does not disclose a computer program product comprising a computer readable medium and computer readable signals stored on the computer readable medium that define instructions that, as a result of being executed by a computer, instruct the computer to perform a method of ascribing a ratee reputation to a first entity, the method comprising: receiving a first rating of the first entity by a second entity; accessing a first rater reputation representing a reputation of the second entity as a qualitative rater of other entities; and generating a ratee reputation of the first entity, comprising combining the first rater reputation and the first rating, as recited in claim 13.

Therefore, for at least these reasons, claim 13 is not anticipated by Zacharia under §102(b). Accordingly, Applicant respectfully requests that the rejection of claim 13 under §102(b) as being anticipated by Zacharia be withdrawn. Claims 31-43, which each depend directly or indirectly from claim 13, patentably distinguish over the art of record for at least the same reasons as claim 13. Accordingly, Applicant respectfully requests that the rejection of these claims under §102(b) be withdrawn.

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CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted
Doe et al, Applicants

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